

## Next Steps: Asbestos-in-Soil

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**Comment Summary, Critical:** Comments indicated that the proposal goes too far in some areas: small pieces of ACM and fibers pose the most risk but the emphasis in the proposal is on larger, *visible* chunks. Other comments suggest that the proposal is too broad, too onerous, and too conservative. MADEP should use pilot projects to monitor levels at construction projects or during reuse of asbestos-contaminated soil. The definitions should be simplified to focus on releasable and non-releasable asbestos. Disposal options must be in place before implementing this proposal. The ability to consolidate and cap on-site must be clear. 120-day criteria are too broad and not workable...suggest that a calculated percentage of ACM debris on the surface or in the soil be considered. Sampling protocols are needed for notification, site assessment, risk assessment and disposal. "Continuing Source" language not workable. Systematic and formal training of LSP and DEP personnel is vital.

**Comment Summary, Support:** The proposal would have both positive and negative impacts on Brownfields developments. Support efforts to develop a consistent and coordinated approach to asbestos related releases and the AIS regulations. The goals (a risk-based and cost-effective approach) are right targets [but the program isn't developed sufficiently to implement at this time].

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Based on a review of the comments, the following work plan is recommended:

**1. Reconvene Workgroup.**

The AIS project has benefited greatly from a broad and committed workgroup of stakeholders. Starting at the end of January, DEP will meet with AIS Workgroup to work through technical and regulatory issues raised in the public comments. Primary focus will be on:

- Development of disposal and reuse options (see #2 below)
- Revision of the MCP notification criteria
- Development of sampling protocols to provide *Presumptive Certainty* that assessments will meet DEP assessment expectations.

**2. Coordinate with other Agencies**

The MA Department of Occupational Safety (DOS) and USEPA (under NESHAPS) have asbestos programs that overlap with the MADEP programs. Continued discussion will ensure that DEP provides maximum flexibility to the regulated community within the limits established by the other agencies' program requirements.

**3. Implement Pilot Projects to Evaluate Reuse Options and Policy Implications**

- Use stockpiled soil from North Point Park for grading/shaping at an unlined landfill closure while monitoring particulate and asbestos levels at the work site and in the surrounding environment. Monitoring data collected may provide documentation for expanding reuse options for this material.
- Use 3 concurrent DCAM site assessments at locations on the former Boston State Hospital site to pilot the assessment, remediation and disposal options in the AIS proposal.
- The LSP Association has offered interns to assist DEP in reviewing particulate monitoring data collected at landfills during operations that could also be used to assess potential risks.

**3. Determine Promulgation Schedule.**

Recommendation: Finalize package to send to EOE/A&F on May 27, 2005. Promulgate on or about July 1. Target effective date would be September 1.

**4. Develop Training Schedule in coordination with the LSP Association.**

Recommendation: Training sessions in August-October, coincident with the effective date of the regulations.

Likely six or more 8-hour sessions, each training approximately 100 LSP's. BWSC and BWP staff and LSPA members to conduct training (Internal staff training to precede external training).

Summary of Asbestos - in – Soil Comments Received			
Issue	Front (F), Middle (M), Back (B) or All	Comment	From
General	A	There are positive and negative aspects with respect to Brownfields developments. Supports efforts to streamline in a consistent and coordinated approach asbestos related releases and the AIS regulations.	Murray (8), (13), (20)
		The goals (a risk-based and cost-effective approach) are right targets but the program isn't developed sufficiently to implement at this time. Delay implementation until guidance, training, SOPs, etc... are in place.	NAIOP (9), LSPA (12), NBAMC (25)
		In full agreement that the current DEP practice of removing all microscopic traces of asbestos is not supportive of economically viable risk management.	NAIOP (27)
		The implications of the use of the MCP to regulate these materials must be better understood and these impacts addressed before regulatory changes are made.	NAIOP (27)
		A database should be developed to collect information on soil parameters (e.g., % fines, organic carbon content, etc) with a goal of someday being able to relate these factors to releasable fibers measured using the elutriator method.	LSPA (12)
Analysis	A	Standard reference materials and proficiency testing should be required to ensure that data are defensible.	AMEC (28)
		MADEP should strongly consider settings standards and remedial requirements based on the Superfund Method (Modified Elutriator Method) rather than an arbitrary 1% composition limit.	AMEC (28)

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Data	A	There is currently very little data concerning the real risks associated with constructions at sites involving asbestos in soil, and may be insignificant. There is a need for data.	NAIOP (9) & (27), LSPA (12), NBAMC (25)
		MADEP should use pilot projects to systematically monitor air quality during soil management activities consistent with the BMPs presented in the policy. DEP could determine if there is some level of ACM debris that could be managed under the MCP as Remediation Waste or as Contaminated Media under current reuse policies.	NAIOP (27)
Licenses and Certs	A	OSHA regs also apply when work involves asbestos. DEP should seek input from MADLWD about what work would require licenses/certification. Worker training should also be described. The skill set is not the same for handling environmental media impacted by oil and/or hazardous material.	Pelletier (2), LSPA (12), ENSR (34)
Presumptive Certainty	A	MADEP should allow a "Presumptive Certainty" approach to achieving an RAO at an asbestos site.	NAIOP (27), LSPA (12)
Sampling	A	Sampling for disposal will lead to more due-diligence sampling, resulting in a massive site-discovery project driven by lenders. However there's no reliable method to analyze soil for asbestos and the hit/miss aspect reduces predictability and complicates planning.	NAIOP (9), NBAMC (25)
		Before implementation, protocols are needed for evaluating a site to determine if a reporting obligation exists.	LSPA (12)

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Training	A	Before implementation, protocols are needed for sampling and analyses of soil for off-site disposal that are sufficient to "prove a negative"	LSPA (12)
		Before implementation, systematic and formal training of LSP and DEP personnel should be complete. A detailed list of training needs is submitted.	LSPA (12)
		Include a statement that training for "cleanup operations" specified in 29 CFR 1926.65 (or state equivalent) do not apply to cleanup of ACM Soil/Debris.	DoD (14)
Definitions	F	"Asbestos is a family of naturally occurring flexible, fibrous mineral silicates."	DoD (14)
		Counter intuitive: small pieces/fibers should be <u>more</u> of a concern and friable asbestos more likely to have released fibers when processed to make the fill	Pelletier (2)
		3 proposed definitions are confusing - propose 2 terms to distinguish "Debris Containing Releasable Asbestos" from "Debris Containing Non Releasable Asbestos". All releasable asbestos should be reportable and resolvable through the MCP.	LSPA (12)
		Also need definitions for "asbestos-containing structures" and "visible". Naked eye? <i>In situ</i> or somehow manipulated?.	NAIOP (27)

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		Some of the material defined as non-friable would be considered friable by BWP within a building, requiring licenses, certification & training for workers. Most hazardous waste workers don't have that training.	ENSR (34)
		The care and handling of asbestos-containing cement is not addressed.	ENSR (34)
		The term "accessible soil" should be either deleted or defined.	Sovereign (36)
Jurisdiction	F	Once asbestos is identified at a site, management of the asbestos present could remain under BWP regulation, not the MCP. Clear guidance is needed at sites where there's BOTH asbestos and OHM.	ENSR (34)
Notification	F	3/8" size difficult to determine...consistent results of size/quantity criteria. Some SOP should be developed to give Presumptive Certainty, whatever the criteria used. Suggest something like a sieve analysis conducted in a laboratory setting.	LSPA (12)
		It is unclear whether the state expects facilities to go looking for asbestos contamination in soil. Should add language that will provide "asbestos-related" environmental investigation direction to facility owners/operators.	DoD (14)
		Searching for 3/8" pieces is like looking for a needle in a haystack and could worsen conditions by causing ACM to break up and become airborne, particularly if some mechanical sifting is used. Self-management and BMPs are a better way to go.	DoD (14)

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Issue	Front (F), Middle (M), Back (B) or All	Comment	From
LRA	F/M	Agree with having notification criteria for asbestos and ACM.	Sovereign (36)
		120-day criteria are too broad and not workable...suggest that a calculated percentage of ACM debris on the surface or in the soil be considered. Alternative approach described.	NAIOP(27)
		120-day criteria doesn't reflect stated policy to be notified of asbestos at depth if there's a potential for exposure. The regs are silent on an exposure evaluation or the need to notify at a future date when there may be an exposure pathway.	NAIOP(27)
		Support increasing the allowable volume to 100 yd <sup>3</sup> to better address areas that have been backfilled.	NAIOP (27)

Risk	M	Current risk assessment guidance should be expanded to include asbestos, as well as a ShortForm for evaluating asbestos risks.	LSPA (12)
		Target air concentrations for non-residential scenarios should be developed.	LSPA (12)
Continuing Source 40.1003	M	Recommend deleting section defining AIS in accessible soil to be a source to ambient air... perhaps limit to soil containing Releasable Asbestos" and/or some size/quantity criteria be developed. The language as is would preclude A & B RAOs despite showing of NSR. If DEP is concerned about specific kinds of asbestos or certain quantities, this definition should reflect that and be narrower.	LSPA (12), NAIOP (27)

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Deed Notice	M/B	Deed requirement would be prohibitively expensive and would introduce unnecessary uncertainty to transactional proceedings. There will be sufficient diligence to rely on pre-construction characterization studies.	LSPA (12), NAIOP (27)
BMPs	B	BMPs are too broad and too conservative. Should be redrafted to allow for flexibility in testing and safety protocols tailored to the potential for exposure. If the BMPs are too conservative, they will be ignored.	NAIOP (27)
		BMPs should define when in the construction process it is appropriate to reduce the level of management...perhaps based on performance criteria developed during more active soil management portions of work.	NAIOP (27)
		BMPs are too onerous for all the various AIS management activities that could occur at a given site. A redraft of the BMPs is submitted.	LSPA (12)
		DEP should specify TEM test method and action level to be used for confirmatory sampling. AHERA TEM results are structures/mm2 of filter sample, not fibers/cc air	Pelletier (2)
		Action level/clearance criteria should be 0.010 (not 0.01) f/cc to mirror MA DLWD - note potential for rounding from 0.014	Pelletier (2)
		Screening (mechanical?) of soil to find asbestos is futile and could result in release of <u>more</u> fibers. You could even rescreen until you make the pieces smaller than the notification criteria.	Pelletier (2)

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		NH requires 20 mils of polyethylene for asbestos shipments. DEP should require one type of liner regardless of the nature of the material. Can always approve thinner material on a case-by-case basis.	Pelletier (2)
		Issue with placards - DEP should either specify all applicable placards or simply say that loads be placarded in accordance w/US DOT rules.	Pelletier (2)
		Rewrite appendix to include requirements to define the area and extent of cleanup, an inspection and sampling/analysis procedure to determine when cleanup is complete and delete negative pressure requirements. Develop an "Outdoor" procedure. See paragraph 3.6.13 "Abatement of Contaminated Soil" in Unified Facilities Guide Specification 13280A.	DoD (14)
		There's no discussion of erosion control or replanting soil with vegetation as a stabilizing agent.	ENSR (34)
BOL/WSR	B	Waste Shipment Record is the minimum requirement per EPA - you can always add supplemental info like the BOL	Pelletier (2)
		Supports BOL once all the issues concerning management of soils off-site have been addressed.	NAIOP (27)
Disposal Options	B	The proposal to exempt fiber-containing soil from the definition of Special Waste is not enough - reuse of the material must be allowed to reduce costs of disposing of construction-generated soil. Doesn't address disposal of asbestos containing debris. Must be in place before implementing this program.	NAIOP (9) & (27), LSPA (12), NBAMC (25)

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		The ability to consolidate and manage material on-site is unclear. It must be clear -- and allowed.	LSPA (12), NAIOP (27)
		Limiting use of engineered barriers to non-residential property would eliminate the consolidation and capping of ACM on-site -- a practice DEP has allowed in the past and should continue to allow.	NBAMC (25)